

THE EVOLUTION OF EFFICIENCY IN MATERIAL HANDLING



Gearless motorized driven roller featuring integrated drive



Most powerful motorized driven roller on the market



Direct drive technology offers **superior energy saving** compared to conventional technology



48 VDC power supply



One model runs any speed and torque



The elimination of gears results in an **extremely quiet motor roller**



Standard 5 pins - M8 - connector for ease of use



Encoder Feedback provides precise speed control, with 7168 pulses per revolution.

Based on 15 years of expertise in gearless motorized roller technology, the MTR 46 AD takes performance to the next level. Developed from the proven MTR 46 series, this new version enhances the already remarkable benefits of direct drive technology by integrating an advanced electronic drive.

MTR 46 AD series revolutionized energy efficiency with its gearless design and superior energy savings compared to traditional geared systems. Its direct drive motor optimizes performance and also ensures remarkably quiet operation, making it ideal for noise-sensitive environments. With its ability to cover any speed and torque with a single model, MTR 46 AD simplifies design and reduces inventory needs.

Now, with the **MTR 46 AD**, we take this innovation even further. The integrated drive enhances control, efficiency, and ease of installation, making this motorized roller the perfect choice for seamless automation.

Experience the future of motion technology-streamlined, powerful, and intelligently designed.



MTR 46 AD **Power, efficiency**and innovative design



MTR 46 AD is today the most powerful motorized driven roller on the market, delivering 75W and 115W power ratings, enabling faster movement and higher payload capacity. Its advanced gearless direct drive design minimizes mechanical losses, reduces energy costs, and ensures quiet operation. The 48Vdc power supply enhances efficiency and simplifies wiring.

Advanced Control and Connectivity

MTR 46 AD features an encoder with 7168 pulses per revolution for precise speed control. It supports two interface options: Analog Velocity and CANopen, compatible with DS301/DS402 protocols for Industry 4.0 integration. A standard 5 pin - M8 connector ensures easy connection to automation systems.

Flexible and easy integration

With its gearless design, a single model meets various application needs, simplifying inventory management and maintenance.

The integrated drive reduces wiring and streamline installation. It is available in two versions: a frameless 46 mm cartridge (for 50mm rollers) and a Power Pack solution with a complete 50mm roller.

Compatible and ready for trouble-free integration with:

5PEPPERL+FUCHS







Technical data

SPECIFICATION	MTR 46.105	MTR 46.140
STALL TORQUE	1.05 Nm	1.5 Nm
PEAK TORQUE	3.2 Nm	4.5 Nm
RATED SPEED	800 RPM (2 m/s)	800 RPM (2 m/s)
RATED POWER	75W @ 48Vdc	115W @48Vdc
POWER SUPPLY	24 and 48 Volt	
VERSIONS	Cartridge (46mm), Complete Roller (50mm)	



Application advantages

Our advanced direct drive technology eliminates the constraints of gearbox ratios, enabling simple torque and speed variations with just one motorized roller model for any conveying application. This innovation simplifies inventory and design while enhancing performance and energy efficiency-key factors for material handling industries striving for optimization and sustainability.